



6 December 2023

AIM: AAU

FURTHER POSITIVE DRILLING RESULTS AT HIZARLIYAYLA

Ariana Resources plc ("Ariana" or "the Company"), the AIM-listed mineral exploration and development company with gold mining interests in Europe, is pleased to announce a further set of results from the Hizarliyayla area of the Salinbas Project and outline the progress of the geophysical survey over the area. The project is operated via Zenit Madencilik San. ve Tic. A.S. ("Zenit"), in partnership with Proccea Construction Co. and Ozaltin Holding A.S. and is 23.5% owned by Ariana.

Highlights:

- Hizarliyayla drilling programme completed for 6,005.8 metres, comprising 10 diamond drillholes since December 2022.
- Best high-grade intercepts to date include:
 - HZR006 1.0m @ 2.80g/t Au + 5.26g/t Ag from 72.5m
 - HZR003 3.4m @ 1.08g/t Au + 7.11g/t Ag from 202.0m
 - HZR003 2.0m @ 1.17g/t Au + 52.03g/t Ag + 2.76% Zn + 0.23% Cu from 333.0m
 - HZR001 4.9m @ 2.85% Zn + 0.96% Pb + 30.17g/t Ag from 158.5m
 - HZR003 1.3m @ 0.75% Cu from 49.0m
- Best longer, lower-grade intercepts include:
 - o HZR003 24.4m @ 0.34g/t Au + 2.88g/t Ag from 182.3m
 - HZR002 36.4m @ 0.17g/t Au + 1.18g/t Ag from 186.3m
 - HZR002 29.2m @ 0.12g/t Au + 1.61g/t Ag from 293.3m
- 4,503 assay results received to date, with 2,467 remaining samples pending assay and multi-element analysis at the Kiziltepe Mine Laboratory ("KML").

Dr. Kerim Sener, Managing Director, commented:

"Six months on from our announcement of the discovery of a substantial intermediatesulphidation precious and base-metal-rich epithermal system at Hizarliyayla, we are very pleased to announce further positive drilling results from the extended drilling programme. We were able to yield typically better gold and silver grades than our discovery drillholes and this work represents the culmination of a concerted effort to understand the operative mineral system across the broader Salinbas Project area. We recognise that Hizarliyayla represents a zone of mineralisation and alteration which lies on a potential extension of the Hot Maden system, separated by about 8 kilometres and developed along similar structures. Significantly, the gold and silver grades encountered in all drilling to date typically improve with increasing depth, suggesting that a precious-metal dominant zone lies somewhere beyond 250 to 500 metres below surface.

"Geological, geochemical, and geophysical data obtained from Hizarliyayla to date suggests that there are several similarities to the mineralisation encountered at Hot Maden. Furthermore, the spacing of mineralisation centres along the NNE-trending corridor encompassing Hot Maden, Hizarliyayla and Salinbas/Ardala is an intriguing feature of the geology and reinforces the high prospectivity of this region. Hizarliyayla appears to be located at the heart of this corridor and the drilling results continue to demonstrate a widely dispersed alteration system containing abundant zones of mineralisation. Our goal now is to identify whether the system has a more highly mineralised core.

"We are presently underway with an Induced Polarization ("IP")/Resistivity geophysical survey at Hizarliyayla, which has been designed for maximum depth resolution. The survey will aid the definition of deep drilling targets ahead of a future drilling programme, which we will aim to conduct in 2024. Initial results from this geophysical survey are encouraging, having established a significant meridional chargeability anomaly across the first three lines of the programme. This matches our geological understanding of the prospect and reinforces the potential of the area to host a well-developed mineral system. The geophysical survey is currently on hold due to winter weather conditions and will recommence in spring 2024. We look forward to communicating further drilling results at Hizarliyayla in 2024."

The information contained within this announcement is deemed by the Company to constitute inside information as stipulated under the Market Abuse Regulations (EU) No. 596/2014 as it forms part of UK Domestic Law by virtue of the European Union (Withdrawal) Act 2018 ("UK MAR").

Drilling Programme

The Hizarliyayla prospect is located 9 kilometres southwest of the Salinbas and Ardala area and about 8.5 kilometres north of the Hot Maden Au-Cu deposit (**Figure 1**). Hizarliyayla is defined by an area of approximately 1,500 metres by 800 metres, containing an argillic to advanced-argillic alteration zone with pervasive disseminated pyrite, silica, and minor gold at surface.

Drilling commenced on the project in late December 2022, and to date, 10 drill holes have been completed for a total of 6,005.8 metres. The objective of the Hizarliyayla drilling programme was to systematically test several soil geochemical targets and intense clay alteration areas.



Figure 1: Summary map showing the completed drillhole collar positions for the Hizarliyayla prospect. The inset topographic map shows the position of Hizarliyayla with respect to Salinbas and Hot Maden, and the mining licences comprising the Salinbas Project (red outline). The location of the first three IP/Resistivity survey lines are shown as dotted yellow lines.

Drillholes were initially planned to 200-300 metre depths; though, most holes intercepted far more alteration and mineralisation than expected. These holes continued to a maximum depth range of 400-800 metres, with the deepest hole being HZR010, which was drilled to 797 metres. All holes intercepted sporadic intermediate sulphidation (Ag-Pb-Zn±Au) type breccia and vein mineralisation which is typically encountered in the periphery of porphyry-style mineralisation (**Figure 2**). This was discussed in more detail in an announcement of the Hizarliyayla discovery drilling on <u>AIM: 21 June 2023</u>.



Figure 2: Scaled map and schematic long-section through the Hot Maden, Hizarliyayla and Ardala/Salinbas areas, identifying the regular spacing of hydrothermal (porphyry derived?) centres. The potentially most well-preserved system occurs at Hizarliyayla and future drilling will need to be planned accordingly.

The Hizarliyayla drilling programme was completed in September 2023; however, 2,467 samples for 2,154 metres of drill core remain pending for assay and multi-element analysis at the Kiziltepe Mine Laboratory. To date, 4,503 results for 3,852 metres of diamond core have been received from the KML.

Table 1: Significant gold and silver intercepts calculated for all Hizarliyayla drilling to date, using a 0.5g/t Au minimum cut-off and allowing for up to 1m internal dilution. Copper, lead, and zinc values are shown for the same intervals. Numbers in bold are considered significant for this project.

Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
HZR002	189.8	190.6	0.8	0.59	0.84	0.06	0.007	0.01
	321.5	322.5	1.0	0.51	14.00	0.006	0.07	0.26
HZR003	22.5	25.0	2.5	0.83	11.68	0.07	0.36	0.94
	185.1	186.5	1.4	1.15	10.86	0.29	0.25	0.34
	202.0	205.4	3.4	1.08	7.11	0.06	0.12	0.22
	235.9	236.4	0.5	0.73	5.70	0.03	0.20	0.50
	333.0	335.0	2.0	1.17	52.03	0.23	0.15	2.76
	436.9	437.9	1.0	1.08	13.27	0.009	0.22	0.46
HZR004	251.3	253.2	1.9	0.66	0.39	0.03	0.003	0
HZR005	359.2	359.6	0.4	1.54	0.25	0.002	0	0.001
HZR006	72.5	73.5	1.0	2.80	5.26	0.09	0.008	0.008
HZR007	198.9	199.3	0.4	0.55	1.74	Data pending		

Table 2: Significant copper, lead and zinc intercepts calculated for all Hizarliyayla drilling to date, using a 0.1% Cu and 1% Pb and 1% Zn minimum cut-off. Gold and silver values are shown for the same intervals. Numbers in bold are considered significant for this project.

Hole ID	From (m)	To (m)	Length (m)	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)
HZR001	158.5	163.4	4.9	0.02	0.96	2.85	0.11	30.17
HZR002	110.4	110.8	0.4	0.11	0.20	0.66	0.20	24.13
	170.5	171.5	1.0	0.18	0.23	0.76	0.11	21.63
	190.6	191.1	0.5	0.10	0.007	0.01	0.32	0.25
HZR003	49.0	50.3	1.3	0.75	0.001	0.005	0.06	0.25
	182.3	183	0.7	0.16	0.06	0.11	0.21	2.33
	185.1	186.5	1.4	0.29	0.25	0.34	1.15	10.86
	202.4	203.2	0.8	0.10	0.11	0.15	0.61	6.96
	333.0	335.0	2.0	0.23	0.15	2.76	1.17	52.03
HZR005	114.9	116.2	1.3	0.02	0.27	1.50	0.15	5.72
	119.4	121.4	2.0	0.34	0.04	0.10	0.33	3.55
	364.3	365.3	1.1	0.11	0.005	0.03	0.09	9.03

These higher-grade intercepts (**Table 1** and **2**) are surrounded by lower-grade, but very extensive alteration – (Refer to **Table 3**).

Table 3: Longer, lower-grade gold and silver intercepts calculated for all Hizarliyayla drilling to date, using a 0.1g/t Au minimum cut-off.

Hole ID	From (m)	To (m)	Length (m)	Au (g/t	Ag (g/t)
	18.0	20.7	2.7	0.15	0.53
	31.7	32.7	1.0	0.11	0.25
	45.5	46.9	1.4	0.17	5.15
	129.8	130.8	1.0	0.16	1.65
	132.0	135.0	3.0	0.16	2.97
TIZINUU I	148.5	152.3	3.8	0.15	19.96
	161.5	166.8	5.3	0.13	43.71
	246.4	247.4	1.0	0.10	1.15
	249.7	263.6	13.9	0.14	5.42
	305.1	306.1	1.0	0.11	0.25
	12.25	13.3	1.1	0.14	1.07
	19.5	21.8	2.3	0.13	0.25
	30.1	31.2	1.1	0.12	0.25
	54.0	55.0	1.0	0.10	1.11
	67.5	68.5	1.0	0.11	0.85
	70.5	75.8	5.3	0.16	3.00
	79.7	81.0	1.3	0.11	1.26
TIZINUUZ	91.4	92.4	1.0	0.15	2.13
	98.4	99.4	1.0	0.18	0.56
	101.4	103.4	2.0	0.13	0.66
	144.0	146.0	2.0	0.27	1.65
	167.5	175.5	8.0	0.13	6.46
	186.3	222.7	36.4	0.17	1.18
	223.7	224.7	1.0	0.11	0.25

Hole ID	From (m)	To (m)	Length (m)	Au (g/t	Ag (g/t)
	235.1	236.1	1.0	0.10	0.66
	238.1	239.1	1.0	0.17	0.25
	246.1	248.8	2.7	0.11	0.25
	256.4	257.4	1.0	0.15	4.97
	268.0	274.5	6.5	0.17	8.92
	283.3	289.1	5.8	0.11	0.65
	293.3	322.5	29.2	0.12	1.61
	323.5	324.5	1.0	0.20	6.70
	356.4	361.8	5.4	0.18	2.41
	24.0	35.8	11.8	0.18	2.72
	47.7	49.0	1.3	0.11	0.25
	182.3	206.7	24.4	0.34	2.88
	242.0	243.0	1.0	0.17	0.79
	244.0	245.0	1.0	0.11	1.41
HZR003	246.0	247.0	1.0	0.12	0.56
	295.8	296.8	1.0	0.28	2.17
	333.0	336.0	3.0	0.88	37.97
	348.1	349.5	1.4	0.26	8.52
	367.0	368.3	1.3	0.12	1.06
	436.9	437.9	1.0	1.08	13.27
	538.3	539.3	1.0	0.15	2.05
	68.1	69.4	1.3	0.11	1.18
	126.7	127.8	1.1	0.17	0.25
HZR004	132.0	133.1	1.1	0.15	0.25
	226.2	227.4	1.2	0.11	0.25
	250.1	256.8	6.7	0.34	0.44
	12.6	13.9	1.3	0.10	1.50
	28.3	29.8	1.5	0.17	3.57
	47.6	48.7	1.1	0.15	0.83
	50.0	51.2	1.2	0.35	0.60
	92.3	93.3	1.0	0.15	0.25
	114.9	126.4	11.5	0.19	2.24
	130.5	132.4	1.9	0.14	1.61
	177.0	178.8	1.8	0.30	2.11
	191.8	194.5	2.7	0.12	0.45
HZR005	199.8	201.8	2.0	0.15	0.92
	206.0	210.7	4.7	0.16	0.76
	212.6	214.6	2.0	0.12	1.39
	215.6	218.1	2.5	0.16	0.25
	222.0	223.0	1.0	0.14	0.25
	259.7	262.3	2.6	0.11	0.91
	264.7	266.7	2.0	0.17	0.57
	297.8	298.8	1.0	0.12	0.25
	361.9	363.2	1.3	0.18	0.25
	389.1	390.1	1.0	0.12	1.26
	404.2	407.4	3.2	0.16	6.19

Hole ID	From (m)	To (m)	Length (m)	Au (g/t	Ag (g/t)
	529.6	530.6	1.0	0.12	0.84
	561.8	563.5	1.7	0.24	2.24
	648.1	649.1	1.0	0.11	0.25
	71.5	73.5	2.0	1.55	3.24
HZR006	114.0	115.2	1.2	0.13	2.51
	280.5	281.5	1.0	0.17	2.26
	7.0	8.0	1.0	0.10	0.64
	145.7	147.0	1.3	0.21	0.44
	188.0	189.0	1.0	0.24	2.56
	198.0	199.3	1.3	0.26	1.12
HZR007	262.2	267.0	4.8	0.16	1.45
	291.2	292.3	1.1	0.13	2.95
	293.3	298.7	5.4	0.11	1.48
	383.0	385.3	2.3	0.28	0.25
	425.3	428.3	3.0	0.14	2.04

Samples obtained from Hizarliyayla have been sent periodically in batches to the KML for analysis. This has resulted in temporary delays and backlogs of pending samples for the Salinbas Project as a whole. The requirement to introduce these samples slowly was undertaken to mitigate high sample flow from other higher priority projects and to allow for sufficient calibration and testing of new instruments introduced to the mine laboratory through an expansion completed during 2021. The day-to-day operational samples from the Kiziltepe Mine, as well as, the significant ongoing flow of samples from the development work underway at the Tavsan Project continue to take priority over the Hizarliyayla analyses.

Soil Sampling

In the weeks leading up to the 2023 Hizarliyayla drilling campaign, the Ariana exploration team completed the collection of over 200 infill soil samples for multi-element assay analysis at ALS Global. This was merged with historic sample results to yield a high-resolution geochemical map containing 1,098 soil samples in the immediate area. This data was extensively interrogated by our in-house geochemistry team. Principal Component Analysis ("PCA") identified significant correlations with key elements (Bi, Sb, Ag, K, Mo, Au, and Pb). The PCA clustering of these elements was plotted and utilised as primary targets for the now-completed drilling programme.

Furthermore, the soil geochemistry also identified a significant zoning of base-metal and precious metal elements (**Figure 3**). This work was a key factor in the design of the drilling programme. Concentrations of precious metals are often indicative of the core of a mineralising system, whereas base metals tend to form on the periphery, and therefore represent lower-priority targets.



Figure 3: Soil geochemical maps for gold and lead, showing the broadly overlapping precious and base metal geochemical signature of Hizarliyayla, with base metals more dominant in the west and gold more dominant in the east.

Geophysics

A geophysical Pole-Dipole IP-Resistivity survey commenced in November 2023 to aid the resolution of deeper targets (**Figure 4**). The 2,500-metre survey lines are oriented broadly perpendicular to the structures in the area, roughly north-south, at 200-metre line spacing. Electrodes are spaced at 50-metre intervals, using a mixed array type of surveying. This provides high resolution near surface, but also deeper signals at lower resolution. The survey parameters have been optimised for depths of up to 500 metres. To date, three lines have been completed, with the remaining three on hold due to unsuitable weather (heavy rain and

snow). Processing and interpretation of the results are ongoing and will be used to better target future drilling.



Figure 4: Results from top to bottom (north to south) of the first 3 lines of the IP/Resistivity survey with resistivity (left) and chargeability (right).

Sampling and Assaying Procedures

All diamond drill core is currently being processed at the Ardanuc depo facility in Artvin and analysed at the Kiziltepe Mine Laboratory. Results are assessed systematically and are grouped according to individual mineralised zones at the Salinbas Project.

HQ-size drill-core samples from the drilling programme at Hizarliyayla were cut in half by a diamond saw and sent for analysis in batches in line with the Company's quality control procedures. Core recovery for all drilling conducted at Hizarliyayla during this campaign was 82%.

To date, a total of 3,617 sample results for 3,852 metres of sampled drill core has been returned from the KML (plus 886 QA/QC samples). So far, 2% of all analysed samples have also been analysed by ALS Global in Izmir as an external laboratory check as part of the QA/QC procedures used for the project, with a 10% check rate to be achieved by the end of the drilling programme. Results are pending for a further 2,467 samples (including 519 QA/QC samples).

QA/QC sample insertion rates vary depending on the batch size accepted by the laboratory. Ariana sampling protocol requires the insertion of 4 QA/QC samples per batch including 1 blank, 1 CRM, 1 field duplicate and 1 pulp duplicate to assess the accuracy and precision of all stages of the sampling and analysis. During the 2021-2023 drilling, Zenit QA/QC protocol required 1 blank, 1 CRM, 1 field duplicate, 1 pulp duplicate and over 10% samples analysed

at an external laboratory. The Zenit QA/QC protocol is under review by both Ariana and Zenit teams following the laboratory upgrade.

The KML has undergone an extensive expansion to meet the significant demands for sample assaying, from both the mining and exploration teams. This expansion is complete with the onsite laboratory, now housing seven furnaces, two ICP-OES instruments, two Atomic Absorption spectrometers, three drying ovens, three crushers and three pulverisers. The laboratory upgrades have allowed for a doubling of sampling throughput (70 samples per day to 135). The two major upgrades for 2021 included the addition of 1) a multi-element ICP-OES (Perkin Elmer Avio 550) analyser, and 2) an Elementrac CS-I sulphur-carbon analyser. The ICP-OES provides the team with a full suite of elements on selected samples (as opposed to just gold and silver).

New operating procedures are currently being internally reviewed and calibrations of the new instruments are being assessed. As part of this, the laboratory team are sending over 10% of their crushed rejects from selected drill core samples to ALS Global in Izmir for check assays. Zenit's internal QA/QC data and sample duplicates have been reviewed and are considered approved for Ariana's reporting purposes. In addition, since October 2022, KML has been accredited by the Turkish Accreditation Agency (TÜRKAK) with 'TS EN ISO/IEC 17025:2017 General Requirements for the Competence of Experimental and Calibration Laboratory'.

All samples were assayed for gold using a 30g fire assay. Multi-element ICP was used for copper, lead, molybdenum, and zinc analyses. Reviews of the assay results have determined that all Quality Control and Quality Assurance samples (blanks, standards, and duplicates) passed the required quality control checks established by the Company, with duplicate samples showing excellent correlation. Laboratory sample preparation, assaying procedures and chain of custody are appropriately controlled. Zenit maintains an archive of half-core samples and a photographic record of all cores for future reference.

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Editors' Note:

The information that relates to Exploration Results is based upon information compiled by Mr Zack van Coller BSc (Hons), Special Projects Geologist, Ariana Resources plc. Mr van Coller has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr van Coller has over 10 years of relevant experience in the Technical Assessments of Mineral Properties. Mr van Coller consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to exploration results is based on information compiled by Dr. Kerim Sener BSc (Hons), MSc, PhD, Managing Director of Ariana Resources plc. Dr. Sener is a Fellow of The Geological Society of London and a Member of The Institute of Materials, Minerals and Mining and has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity that has been undertaken to qualify as a Competent Person as defined by the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and under the AIM Rules - Note for Mining and Oil & Gas Companies. Dr. Sener consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

About Ariana Resources:

Ariana is an AIM-listed mineral exploration and development company with an exceptional track-record of creating value for its shareholders through its interests in active mining projects and investments in exploration companies. Its current interests include gold production in Turkey and copper-gold exploration and development projects in Cyprus and Kosovo.

The Company holds 23.5% interest in **Zenit Madencilik San. ve Tic. A.S.** a joint venture with Ozaltin Holding A.S. and Proccea Construction Co. in Turkey which contains a depleted total of c. 2.1 million ounces of gold and other metals (as at February 2022). The joint venture comprises the Kiziltepe Mine and the Tavsan and Salinbas projects.

The **Kiziltepe Gold-Silver Mine** is located in western Turkey and contains a depleted JORC Measured, Indicated and Inferred Resource of 222,000 ounces gold and 3.8 million ounces silver (as at February 2022). The mine has been in profitable production since 2017 and is expected to produce at a rate of c.20,000 ounces of gold per annum to at least the mid-2020s. A Net Smelter Return ("NSR") royalty of 2.5% on production is being paid to Franco-Nevada Corporation.

The **Tavsan Gold Mine** is located in western Turkey and contains a JORC Measured, Indicated and Inferred Resource of 307,000 ounces gold and 1.1 million ounces silver (as at November 2022). Following the approval of its Environmental Impact Assessment and associated permitting, Tavsan is being developed as the second gold mining operation in Turkey and is currently in construction. A NSR royalty of up to 2% on future production is payable to Sandstorm Gold. The **Salinbas Gold Project** is located in north-eastern Turkey and contains a JORC Measured, Indicated and Inferred Resource of 1.5 million ounces of gold (as at July 2020). It is located within the multi-million ounce Artvin Goldfield, which contains the "Hot Gold Corridor" comprising several significant gold- copper projects including the 4 million ounce Hot Maden project, which lies 16km to the south of Salinbas. A NSR royalty of up to 2% on future production is payable to Eldorado Gold Corporation.

Ariana owns 100% of Australia-registered **Asgard Metals Fund** ("Asgard"), as part of the Company's proprietary Project Catalyst Strategy. The Fund is focused on investments in high-value potential, discovery-stage mineral exploration companies located across the Eastern Hemisphere and within easy reach of Ariana's operational hubs in Australia, Turkey, UK and Zimbabwe.

Ariana owns 75% of UK-registered **Western Tethyan Resources Ltd** ("WTR"), which operates across south-eastern Europe and is based in Pristina, Republic of Kosovo. The company is targeting its exploration on major copper-gold deposits across the porphyry-epithermal transition. WTR is being funded through a five-year Alliance Agreement with Newmont Mining Corporation (<u>www.newmont.com</u>) and is separately earning-in to up to 85% of the Slivova Gold Project.

Ariana owns 58% of UK-registered **Venus Minerals Ltd** ("Venus") which is focused on the exploration and development of copper-gold assets in Cyprus which contain a combined JORC Indicated and Inferred Resource of 17Mt @ 0.45% to 1.10% copper (excluding additional gold, silver and zinc.

Panmure Gordon (UK) Limited and WH Ireland Limited are brokers to the Company and Beaumont Cornish Limited is the Company's Nominated Adviser.

For further information on Ariana, you are invited to visit the Company's website at <u>www.arianaresources.com</u>.

Glossary of Technical Terms:

"Ag" chemical symbol for silver;

"Au" chemical symbol for gold;

"Cu" chemical symbol for copper;

"g/t" grams per tonne;

"KML" Kiziltepe Mine Laboratory;

"m" Metres;

"Mo" chemical symbol for molybdenum;

"PCA" Principal Component Analysis;

"Pb" chemical symbol for lead;

"ppm" parts per million;

"Zn" chemical symbol for zinc.

Ends.